

App. No. 10/007,031
Amdt. Dated June 28, 2004

Reply to Office action of March 29, 2004

REMARKS

Considering the outstanding Office Action, the applicant has amended the specification and claims to more particularly define the invention. The specification
5 has been amended to correct some errors mentioned in Office Action. Claim 2 has been merged into claim 1 and canceled. Claim 1 is amended by adding a "transparent surface" to the "total reflection lens" and described in detail the related position of the invention. The amendments do not introduce new matter and are fully supported by the specification as originally filed.

10 In Office Action, the Examiner rejects the invention under 35 U.S.C. 102 as being anticipated by Eguchi et al.(US2002/0067469) and Park (US2003/0030914).

Eguchi et al. discloses a facing mirror 182 is made by depositing a total reflection film on a concave part of the base material part which is a molded opaque polycarbonate resin. However, it is obvious that the facing mirror 182 could only
15 reflect the light and could not converge the light. On the contrary, in the present invention, the total reflection lens could reflect and converge the light from the light source to achieve the object for simplifying and compacting the whole projection display. So, the fixture and objects of the invention quite differ from those of Eguchi.

Park discloses a Homogenizing and Polarizing Rod Lens 32 having a total
20 reflection gradient surface 32A for total reflecting an incident light and having a polarization divider 34 for dividing non-polarized incident light into S and P polarized lights. It is obvious that the Homogenizing and Polarizing Rod Lens 32 only reflects the light. In the present invention, the transparent surface receives and converges the light, and then the total reflection surface reflects the light, and
25 thereafter, the transparent surface converges the light again. Thus, the present invention could avoid the interference and compact the projection system. So, the fixture and objects of the invention quite differ from that of Park.

In Office Action, the Examiner rejects the invention under 35 U.S.C.103(a) as being unpatentable over Sawai et al.(US6,343,862) in view of Memezawa et
30 al.(US6,433,942). Applicants have carefully considered the rejection, but it is most respectfully traversed for the reason discussed below.

Sawai discloses a PBS prism 13 for passing through the P-polarized light and

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reflecting the P-polarized light. It is obvious that the PBS prism 13 only reflects the light and does not converge the light. However, the present invention could both converge and reflect the light and could simplify the objects and compact the optical system.

5 Memezawa discloses an optical component 2 having a first surface S1, a second surface S2, a bonding surface S3 and a coupling surface S4. The light is first converged by the first surface S1 and then reflected by the second surface S2. Thereafter, the light passes through the coupling surface S4 and then enters the transmission medium 4. However, after reflected by the second surface S2, the light is
10 not converged by the S1 again. Besides, the structure of optical component is complicated. On the contrary, in the present invention, the transparent surface receives and converges the light from the light source, and then the total reflection surface reflects the light to the transparent surface, and thereafter the transparent surface converges the light onto the light valve again. Therefore, the Memwzawa could not
15 simplify and compact the projection system.

In view of the above corrections, favorable reconsideration and allowance of claim now present in the application are most respectfully requested.

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Sincerely yours,



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30 return your call promptly.)